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Cover Page Footnote
* David is currently practicing as a Senior Intellectual Property Counsel at a leading home security technology company. He is responsible for the company's patent preparation and prosecution efforts as well as other technology issues. David's professional career has taken him from overhauling submarines as an engineer with the Department of the Navy to representing Fortune 100 clients in private practice to now serving as a Lead Global Patent Counsel where he develops and implements corporate IP strategies. David holds a Juris Doctorate from the University of New Hampshire Franklin Pierce School of Law and a Bachelor of Science in Mechanical Engineering from the University of New Hampshire. He is admitted to the State Bar of New Hampshire and licensed to practice before the United States Patent and Trademark Office.
A Glance Not Taken—When Claim Interpretation Ignores the Best Evidence

David R. Soucy, Esq.*

A little-known but longstanding rule of patent law is that the article “a” means one or more than one when recited within a patent claim. But the commonly understood meaning of “a” is a numerosity of just one. The case of Salazar v. AT&T Mobility is about the misapplication of the patent law general rule of indefinite articles to find that the term “a microprocessor” means just one microchip. That fundamental tenet states that “a” means one or more than one, unless a patentee disavowed that meaning as evidenced by: (1) other language of the claims (i.e., dependent claims or other text of the claim at issue), (2) the remainder of the specification (e.g., the detailed description or figures), or (3) statements recorded in prosecution history. Unfortunately, the courts did not properly apply the general rule. Rather, the Federal District Court, for instance, relied on the recitation of definite articles that referred back to the phrase “a microprocessor” as an exception to the general rule. But such language does not invoke a patentee’s intent about numerosity but rather is required by the antecedent basis rules of the Patent Office. This rationale is more akin to the common understanding of “a” rather than the patent law rule. A fair reading of “a

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microprocessor” as recited in the claims is that the phrase means either one or more than one—nothing recited therein would prevent either interpretation. The Federal Circuit fared no better in its analysis. There the court made misstatements of law concerning the transitional phrase “comprising” invoking the general rule. But transitional phrases affect the scope of the claims as a whole, not individual terms recited therein. Further, the court relied on flawed precedent that also neglected to look at the best evidence (i.e., the rest of the patent specification) to determine an inventor’s intent. Consequently, the courts’ decisions in Salazar offer incomplete analyses of the issue justified by other precedent with piecemeal, claim-centric reasoning. Absent anything more (i.e., other limiting claim language or statements in the specification or prosecution history), the courts should have ruled the other way. But there was more. The patent included a robust description of the invention that evidenced a clear intent that the claims be limited to a single microprocessor. Thus, the courts arrived at the correct conclusion but for all the wrong reasons. And this is unfortunate because the courts’ claims-only approach eliminates the rule of indefinite articles altogether. The decisions now make a singular meaning of indefinite articles a guaranteed result.
INTRODUCTION

One word. One solitary term recited within a claim of nearly 200 words. One word pulled from 30 columns of neatly arranged and efficiently formatted text. That one article was the difference between infringement and non-infringement. The case of Salazar v. AT&T Mobility is about one particular claim term, “a”—the shortest word in the English language. On its face that article appears innocently innocuous and readily understood. The word “a” is very familiar to layman and lawyers alike and commonly used by all English-speaking people. That word, unlike other claim terms, is not a coined expression created by the patentee for the expressed purpose of seeking a patent. Nor does “a” invoke any complicated technological meaning. Likely all involved in the patenting process (i.e., the inventors, the patent practitioner, and even the examiner) paid little to no real attention to it and proceeded with patent examination without giving it a second thought. But the meaning of that one, monosyllabic word is what this decision hinges upon.

Patent infringement requires determining the scope of claims and finding that the construed claims encompass the accused product. Salazar concerns the first part of this analysis—proper claim interpretation. To resolve disputes involving the meaning of claim terms, three pieces of intrinsic evidence are used: (1) the claims themselves, (2) the drawings and other text of the patent, and (3) the patent’s prosecution history. Other extrinsic evidence (e.g., expert testimony or dictionaries) can be consulted, but may prove to be less helpful. The analysis in Salazar is flawed because the court failed

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1 Salazar v. AT&T Mobility LLC, 64 F.4th 1311 (Fed. Cir. 2023).
3 Salazar, 64 F.4th at 1313.
4 Mannesmann, 793 F.2d at 1282.
5 See McGill Inc. v. John Zink Co., 736 F.2d 666, 675 (Fed. Cir. 1984) (discussing conflicting testimony of experts); Phillips v. AWH Corp., 415 F.3d 1303, 1317–18 (Fed. Cir. 2005) (“However, while extrinsic evidence ‘can shed light on the relevant art,’ we have explained that it is ‘less significant than the intrinsic record in determining the legally operative meaning of claim language . . . . [E]xpert testimony can be useful to a court . . . . However, conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.” (internal citations omitted)).
to look beyond the patent’s claims to understand the meaning of the term “a microprocessor.” The error here is that the court flatly ignored the best evidence (i.e., the rest of the patent specification) that is key to understanding the scope of the claimed invention.⁶

In law as in life, there are fundamental rules that guide courses of conduct.⁷ Some rules may be more well-known than others, but notoriety is not the touchstone. Rather, a rule is fundamental when its teachings go to the heart of an understanding of a subject and its applicability is general, not specific.⁸ In patent law, there are some fundamental canons of claim construction that assist courts in properly construing patent claims.⁹ For example, a well-known fundamental rule is that the term “comprising” invokes a meaning that the claim includes at least those elements recited in the claim, but it may cover more.¹⁰ On the other hand, a lesser-known fundamental rule of claim construction is that the article “a” means one or more than one.¹¹

The court’s decision in Salazar is rife with legal mischief concerning these fundamental patent law concepts. Statements about “a” meaning one or more when the claim contains the transitional

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⁶ See Salazar, 64 F.4th at 1317–18 (“Like the claim language in Convolve and Varma, the claim language here requires a singular element—‘a microprocessor’—to be capable of performing all of the recited functionality . . . . [T]he claim language requires at least one microprocessor capable of performing each of the recited functions.”).
⁹ See Merck & Co., Inc. v. Teva Pharmas. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003) (“A fundamental rule of claim construction is that terms in a patent document are construed with the meaning with which they are presented in the patent document . . . . Thus, claims must be construed so as to be consistent with the specification, of which they are a part.”).
¹⁰ John L. Landis, Mechanics of Patent Claim Drafting 11 (2d ed. 1974) (“The word ‘comprises’ has been construed to mean, in patent law, ‘including the following elements but not excluding others.’” (internal citations omitted)).
¹¹ Id. at 27 (“Where one or more will function, then one merely claims ‘a’ member (singular), and this covers more than one.”).
phrase “comprising” are non-sensical and damaging to the general understanding of patent law. A sound knowledge of transitional phrases is necessary to properly interpret the claims. It is a basic tenant of patent law that the term “comprising” when recited in a preamble of a claim does not limit individual terms of a claim, but instead limits the scope of the claim as a whole. The Salazar court’s rational about transitional phrases limiting individual words of a claim is perplexing and simply incorrect.

Similarly, the court’s statements about the meaning of “a” are bewildering in view of the long-standing rule for indefinite articles. The tenet states that the term “a” means one or more than one unless the patentee explicitly disavowed that meaning (e.g., as evidenced by the rest of the specification or prosecution history). In Salazar, however, the court decided that the rule of indefinite articles is no rule at all; rather, the court acted like the rule was a mere suggestion. However, rules are made to be followed, not ignored. After declining to invoke the rule of indefinite articles, the Salazar court concluded that the term “a microprocessor” means only one based on a literal reading of the claims. This approach seems more akin to contracts with its myopic focus on the literal meaning of words, not patent law. To justify its decision, the Salazar court cited to flawed precedent that either failed to properly apply the general

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12 Salazar v. AT&T Mobility LLC, 64 F.4th 1311, 1315 (Fed. Cir. 2023).
13 See J. Thomas McCarthy, McCarthy’s Desk Encyclopedia of Intellectual Property 85 (3d ed. 2004) (Comprising is “[a]n open-ended transition phrase in a patent claim connecting the preamble with the body of the claim that lists the various claim elements. To say that an invention is one ‘comprising’ listed elements means that those elements must all appear in the invention, but that additional elements may also be present.”).
14 Landis, supra note 10, at 27.
15 Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342 (Fed. Cir. 2008) (“That ‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely as a presumption or even a convention. The exceptions to this rule are extremely limited: a patentee must ‘evince[]’ a clear intent to limit “a” or “an” to “one.”” (internal citations omitted)).
16 See Salazar, 64 F.4th at 1316. (“Baldwin . . . does not set a hard and fast rule that ‘a’ always means one or more than one.” (citing Harari v. Lee, 656 F.3d 1331, 1341 (Fed. Cir. 2011))).
17 See id. at 1317 (interpreting the claim to require “a microprocessor” to mean just one rather than one or more under the general rule).
rule (along with its exceptions) or used a completely different standard altogether (e.g., the preamble exception to the general rule created in *Convolve, Inc. v. Compaq Computer Corp.*).\textsuperscript{18} The result being that the court grounded its decision on a literal reading of claim terms (e.g., terms of antecedent basis) that referred back to the phrase “a microprocessor.”\textsuperscript{19} But that reasoning was thoroughly debunked and rejected by the Federal Circuit’s decision in *Baldwin Graphic Systems v. Siebert, Inc.*, where that court made clear that references back do not mandate a singular meaning.\textsuperscript{20} Rather, courts must look for the patentee’s intention that he or she desired to depart from the general rule that “a” means one or more than one.\textsuperscript{21} For these reasons, the decision in *Salazar* is another example of problematic precedent decreed by the one court charged with the responsibility of clarifying patent law.

I. **Ordinary Meaning of Words**

Patent infringement is a two-step analysis in which the claim language must first be interpreted, followed by a determination about whether those claims read on an accused product.\textsuperscript{22} Claim interpretation begins with the words of a claim, and those words are

\textsuperscript{18} See *Convolve, Inc. v. Compaq Comput. Corp.*, 812 F.3d 1313, 1321 (Fed. Cir. 2016) (“Here, unlike claims 9 and 15, the language and structure of claim 1 demonstrate a clear intent to tie the processor that ‘output[s] commands to the data storage device’ to the ‘user interface.’ Specifically, claim 1 recites ‘a processor’ in the preamble before recitation of ‘comprising,’ and the claim body uses the definite article ‘the’ to refer to the ‘processor.’”); *In re Varma*, 816 F.3d 1352, 1362 (Fed. Cir. 2016), (The court discussed how “a” can sometimes mean a non-restrictive number but that “a” cannot negate limitations that follow. But the general rule of indefinite articles states that “a” means one or more than one unless there is an exception (i.e., disavowal of that meaning by the patentee). In finding that interpretation of the Board to be unreasonable, the court failed offer evidence of any disavowal by the patentee that supported construing “a” to be mean only one.); *Harari v. Lee*, 656 F.3d 1331, 1341–42 (Fed. Cir. 2011) (The *Harari* court read the claims in light of the description of the Lee patent but the *Salazar* court paraphrased the holding from *Harari* to be that claim language alone was the decisive factor to not apply the general rule of indefinite articles, which appears disingenuous.).

\textsuperscript{19} *Salazar*, 64 F.4th at 1317.

\textsuperscript{20} *Baldwin*, 512 F.3d at 1343.

\textsuperscript{21} *Id.*

\textsuperscript{22} *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 452 (Fed. Cir. 1985).
generally given their ordinary and customary meaning. That meaning is one that a person of ordinary skill in the art at the time of invention would give to a claim term after reading the entire patent. However, the ordinary and customary meaning of claims can be ambiguous and thus not readily apparent. To remedy this deficiency, a court can look to (1) the words of the claims themselves, (2) the patent’s specification, (3) prosecution history of the patent, and (4) extrinsic evidence (e.g., technical dictionaries). The specification, however, is the primary basis for construing claims. The Supreme Court has found it entirely reasonable to resort to the specification for the purpose of better understanding the meaning of claims. Accordingly, patent claims are read in light of the specification and any ambiguity as to the scope or meaning of a claim may be cleared up by reference to the text and drawings of the patent.

The Federal Circuit’s decision in Standard Oil Co. v. American Cyanamid Co. is instructive about the proper way to interpret

23 Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (“[T]he Supreme Court made clear that the claims are ‘of primary importance, in the effort to ascertain precisely what it is that is patented.’” (internal citations omitted)).
24 Id. at 1313.
25 See Ex parte Tan, No. 2011-011355, 2014 WL 869342, at *3 (P.T.A.B. Feb. 18, 2014) (“Given the differing views of the Examiner and Appellants regarding the meaning of ‘substantially similar’ as expressed above, as well as the Specification’s lack of either a clear definition or consistent guidance as to the meaning of these claim terms, we determine the scope of the claims is ambiguous . . . . It is well settled that the word ‘substantially’ has numerous ordinary meanings.”).
26 Phillips, 415 F.3d at 1314.
27 See Standard Oil, 774 F.2d at 452.
28 See White v. Dunbar, 119 U.S. 47, 50 (1886) (“[W]e see nothing in the context of the specification in the original patent which could possibly give the claim so broad a construction.”).
29 See Aero Spark Plug Co. v. B. G. Corp., 130 F.2d 290, 291 (2d Cir. 1942) (“The scope of every patent is limited to the invention which is covered in the claims read in the light of the specifications . . . . And when claim 2 is so read there is no doubt that the only advance from the old to be found in Kasarjian’s construction of the spark plug is that all the air spaces be filled with a refractory insulating substance.”); Goodman v. Paul E. Hawkinson Co., 120 F.2d 167, 171 (9th Cir. 1941) (“The patentee is entitled to have the claims of the patent construed with reference to the drawings and specifications. Where the means referred to in claims are clearly shown in the description of the patent, this description is sufficient to cover the means thus disclosed and its mechanical equivalents.” (quoting Shull Perforating Co. v. Cavins, 94 F.2d 357, 364 (9th Cir. 1938))).
30 Standard Oil, 774 F.2d 448.
patent claims. That case involved a dispute between two manufacturers of acrylamide.\textsuperscript{31} One of the manufacturers, Sohio, believed that the other, Cyanamid, was using its patented process to make acrylamide without authorization and so filed suit for patent infringement.\textsuperscript{32} Cyanamid was manufacturing acrylamide with a process that used a catalyst made of almost pure metallic copper.\textsuperscript{33} The claims of the patent at issue, however, recited, in part, “said copper ion being ‘at least partially soluble in water, nitrile or in both water and nitrile. . .’”\textsuperscript{34}

After a restatement of general principles for determining patent infringement, Judge Rich noted that the validity of the claims depended on the claims having a clear and definite meaning when construed in light of the complete patent document.\textsuperscript{35} The specification, therefore, is the primary basis for construing the claims, but a patent’s prosecution history can also limit a claim’s interpretation.\textsuperscript{36}

Applying the above legal framework, the court undertook the task of construing the meaning of the term “copper ion.”\textsuperscript{37} The court reviewed the patent specification and observed that metallic copper, when used alone, is ineffective to manufacture acrylamide.\textsuperscript{38} Next, the court noted that Sohio’s representatives stated that metallic copper was outside the scope of the claims which the court took as a clear and unmistakable surrender of claim scope.\textsuperscript{39} Further, the court stated that while the patent described a catalyst that included copper ions in solution, the accused process, in contrast, used a solid, insoluble catalyst that is essentially pure metallic copper.\textsuperscript{40} In view of

\textsuperscript{31} Id. at 450–51.
\textsuperscript{32} Id. at 451.
\textsuperscript{33} Id. (“Cyanamid’s process is essentially pure metallic copper (Cu\(0^{+}\)), or zero valence copper) . . . . Tests of Cyanamid’s reactor effluent showed that it contained minute quantities of soluble copper ions, on the order of one or two parts per million . . . .”).
\textsuperscript{34} Id.
\textsuperscript{35} Id. at 452.
\textsuperscript{36} Id. (“Thus, the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.”).
\textsuperscript{37} Id.
\textsuperscript{38} See id.
\textsuperscript{39} Id. at 453 (“By making this disclaimer or concession, Sohio surrendered any interpretation of its claim that would include metallic copper catalysts.”).
\textsuperscript{40} Id.
these findings, the court affirmed the district court’s decision of non-infringement.

Another instructive decision by the Federal Circuit is that of Multiform Desiccants, Inc. v. Medzam Ltd.\textsuperscript{41} There, the dispute arose over a claim of patent infringement related to a packet for controlling liquid spills.\textsuperscript{42} More particularly, the dispute centered on the meaning of the term “degradable” as recited in the claims.\textsuperscript{43} Multiform’s packet contained absorbent materials and formed part of an outer shipping container that enclosed an inner container of hazardous liquid.\textsuperscript{44} Upon rupture of the inner container, the physical structure of the packet (i.e., the outer container) would disintegrate allowing the liquid to contact the absorbent material and be absorbed to prevent spillage of the hazardous liquid.\textsuperscript{45} In contrast, Medzam’s packet included porous outer material (like a tea bag) that contained absorbing material.\textsuperscript{46} During a spill, the liquid would pass through the porous outer layer to penetrate the packet.\textsuperscript{47} Once inside, the liquid would contact the absorbent material causing the material to expand and spilt the outer, porous layer of the packet to release its contents for additional absorption effect.\textsuperscript{48}

The court’s analysis began with several guiding principles of patent claim construction. After restating the definition of patent infringement, Judge Newman began with the principle that any disputed words must be addressed before applying any claim interpretation to the accused product.\textsuperscript{49} Next, the court reiterated the principle that claim interpretation is done through the eyes of one of ordinary skill in the art who is deemed to have read the patent documents (i.e., specification and prosecution history) with the knowledge of any special meaning or usage in the field.\textsuperscript{50} In other words, an

\textsuperscript{41} 133 F.3d 1473 (Fed Cir. 1998).
\textsuperscript{42} Id. at 1475.
\textsuperscript{43} Id. at 1476.
\textsuperscript{44} See id. at 1475.
\textsuperscript{45} See id.
\textsuperscript{46} Id. at 1475–76.
\textsuperscript{47} Id. at 1476.
\textsuperscript{48} Id.
\textsuperscript{49} See id.
\textsuperscript{50} Id. at 1477.
inventor’s description of the invention must be understood and interpreted by the court as would be done by a person in that field of technology.\textsuperscript{51} Construing claims must therefore necessarily begin with those resources available to one of ordinary skill, namely the patent specification and prosecution history.\textsuperscript{52} Notably, the court made the point that these documents not only carry legal significance but also technical information, as well.\textsuperscript{53} When the meaning of a term is sufficiently clear from its use in the specification, then that meaning shall apply for purposes of construing a claim.\textsuperscript{54} A well-known axiom in patent law is that an inventor can be his or her own lexicographer, but any special meaning of a term must be sufficiently clear in the specification to justify a departure from common usage as understood by a person of experience in the field of invention.\textsuperscript{55}

Mindful of these legal precepts, the court began its review of the district court’s interpretation that “degradable” does not mean packet rupture.\textsuperscript{56} Judge Newman reiterated that the specification is the best source for understanding a technical term in view of the prosecution history.\textsuperscript{57} Also, the prosecution history can be very influential to properly understand a claim term because it reveals how those closest to the patenting process (i.e., the inventor and patent examiner) viewed the subject matter.\textsuperscript{58} Upon review of the specification, the court identified text describing an envelope that degrades after coming in contact with liquid.\textsuperscript{59} The patent specification further explained that degradation of the envelope resulted from dissolution of soluble material that made up that envelope.\textsuperscript{60} In particular, the dot matrix pattern permitted liquid to completely degrade the envelope.\textsuperscript{61} In light of these facts, the Federal Circuit concluded that
the meaning of “degradable” was limited to dissolution or degradation of the packaging.\footnote{Id.} Thus, the district court correctly found that Medzam’s technology for bursting of packets was outside the scope of Multiform’s claims.\footnote{Id.}

Accordingly, patent claims are construed in light of the specification to which they are appended thereto. That meaning informed by the patent specification, however, may be limited in light of the prosecution history of the patent. Otherwise, a patentee could say one thing to obtain a patent, but then say something else altogether different in patent litigation to achieve a judgment against another party. Although other language within a set of claims may inform a particular interpretation of a word or phrase recited therein, the best evidence (i.e., the description and drawings contained within the patent) cannot be ignored. At the very least, that information must be first reviewed and understood before making any interpretation as to the meaning of the claim. Otherwise, a decision maker is merely substituting their understanding of a claim term for that of the inventor.

II. MISCONSTRUING THE TRANSITIONAL PHRASE “COMPRISING”

In patent law, the term “comprising” is generally understood to mean including the following elements but not excluding others.\footnote{LANDIS, supra note 10, at 11 (“The word ‘comprises’ has been construed to mean, in patent law, ‘including the following elements but not excluding others.’” (internal citation omitted)).} Most often “comprising” acts as a transitional phrase between the preamble and the body of the claim.\footnote{See id. (“Most ordinary combination claims require a transitional phrase between the preamble (naming the thing to be claimed) and the body of the claim (defining what the elements or parts of the thing are). Two recommended forms of transition which can be employed for most claims are the phrases: ‘which comprises’ or ‘comprising.’”)} When used in this fashion, “comprising” means that the named elements of a claim are essential but other elements may be added and yet still fall within the scope
of the claim.\textsuperscript{66} Transitional phrases do not limit individual words of the claim but rather, affect the interpretation of the claim as a whole.\textsuperscript{67} The Federal Circuit’s statement in Salazar that “a” means one or more in open-ended claims containing the transitional phrase “comprising” is patent misspeak and just flatly wrong.\textsuperscript{68}

In support of its position, the Salazar court pointed to the Federal Circuit’s decision in \textit{KCJ Corp. v. Kinetic Concepts, Inc.}\textsuperscript{69} \textit{KCJ Corp.}, however, further pointed to \textit{Elkay Manufacturing Co. v. Ebco Manufacturing Co.},\textsuperscript{70} \textit{Abtox, Inc. v. Exitron Corp.},\textsuperscript{71} \textit{North American Vaccine, Inc. v. American Cyanamid Co.},\textsuperscript{72} and Landis on Mechanics of Patent Claim Drafting\textsuperscript{73} for that same proposition.\textsuperscript{74} Taking each one of these citations in turn, we begin with the Federal Circuit’s decision in \textit{Elkay Manufacturing Co. v. Ebco Manufacturing Co.} In that case, the court held that the plain meaning of “an upstanding feed tube” is not limited to a single feed tube based on the open term comprising.\textsuperscript{75} In support of its holding, the court cited to its decision in \textit{PPG Industries v. Guardian Industries Corp.}\textsuperscript{76} But that citation does not support the court’s interpretation of the term

\textsuperscript{66} Genentech, Inc. v. Chiron Corp., 112 F.3d 495, 499 (Fed. Cir. 1997) (“Second, the district court improperly limited the transitional phrase ‘comprising,’ which allows additional elements to be present as long as the named elements are present, to exclude additional DNA between the alpha-factor processing sequences and the human IGF-I sequence.”); Moleculon Rsch. Corp. v. CBS, Inc., 793 F.2d 1261, 1271 (Fed. Cir. 1986), abrogated on other grounds by Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665 (Fed. Cir. 2008) (explaining the term “comprises” opens a method claim to the inclusion of steps in addition to those stated in the claims).

\textsuperscript{67} See, e.g., \textit{In re Baxter}, 656 F.2d 679, 686 (C.C.P.A. 1981) (“[T]he term ‘comprises’ permits the inclusion of other steps, elements, or materials.”); \textit{In re Varma}, 816 F.3d 1352, 1362 (Fed. Cir. 2016) (“Although the transitional term ‘comprising’ indicates that the claim is open-ended, the term does not render each limitation or phrase within the claim open-ended.”).

\textsuperscript{68} Salazar v. AT&T Mobility LLC, 64 F.4th 1311, 1315 (Fed. Cir. 2023).

\textsuperscript{69} \textit{Id.}

\textsuperscript{70} 192 F.3d 973 (Fed. Cir. 1999).

\textsuperscript{71} 122 F.3d 1019 (Fed. Cir. 1997).

\textsuperscript{72} 7 F.3d 1571, 1573 (Fed. Cir. 1993).

\textsuperscript{73} ROBERT C. FABER, LANDIS ON MECHANICS OF PATENT CLAIM DRAFTING 531 (3d ed. 1990) (“In a claim, the indefinite article A or AN connotes ‘one or more.’”) [hereinafter “LANDIS ON MECHANICS”].

\textsuperscript{74} \textit{KCJ Corp. v. Kinetic Concepts}, 223 F.3d 1351, 1356 (Fed. Cir. 2000).


\textsuperscript{76} \textit{Id.} (citing PPG Indus. v. Guardian Indus. Corp., 156 F.3d 1351 (Fed. Cir. 1998)).
“comprising.” Rather, the court in PPG was concerned with the transitional phrase “consisting essentially of.”77 Moreover, PPG is silent about the meaning of claim language when a claim’s preamble recites the term “comprising.”78 Therefore, the Elkay court’s statement about the term “comprising” influencing the meaning of individual words of a claim is without support.

Next in Abtox Inc., v. Exitron Corp., the court stated that “a” can mean one or more in a claim using the transitional phrase comprising.79 To support this statement the court cited to its decision in North American Vaccine, Inc. v. American Cyanamid Co. and the legal treatise Landis on Mechanics of Patent Claim Drafting.80 But none of these citations support that statement of law. Beginning with the decision in North American Vaccine, Judge Lourie made no mention of transitional phrases regarding his discussion of indefinite articles.81 He simply restated the rule and pointed to the legal treatise Landis on Mechanics of Patent Claim drafting for support of that fundamental tenet.82 Landis also made no reference to transitional phrases when stating the general rule of claim interpretation of indefinite articles.83 Thus, the court’s general assertion that indefinite articles are limited by transitional phrases is simply incorrect and unsupported.

Therefore, the court’s legal statement in Salazar that “a” means one or more when the claims recite the transitional phrase “comprising” is incorrect. The cases and treatises mentioned above provide no support for such a legal conclusion. Rather, the traditional canons of patent law dictate that the indefinite article be construed as

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77 PPG Indus., 156 F.3d at 1354 (discussing the meaning of the term “consisting essentially of”).
78 See generally id.
79 122 F.3d 1019, 1023 (Fed. Cir. 1997).
80 Id. (citing N. Am. Vaccine, Inc. v. Am. Cyanamid Co., 7 F.3d 1571 (Fed. Cir. 1993); LANDIS ON MECHANICS, supra note 73).
81 See generally N. Am. Vaccine, 7 F.3d at 1573–80 (stating the general rule of indefinite articles without reference to the term “comprising”).
82 Id. at 1576.
83 LANDIS ON MECHANICS, supra note 73 (“In a claim, the indefinite article A or AN connotes ‘one or more’”).
meaning one or more than one unless an exception applies as will be discussed in further detail below.84

III. BIG A, LITTLE A—WHAT DOES “A” MEAN TO THEE

The general rule in patent law is that unless otherwise qualified, “a,” “an,” and “one” are read as though they are preceded by the phrase “at least.”85 This rule is clearly stated in the Federal Circuit’s decision in Baldwin Graphic Systems, Inc. v. Siebert.86 There, Judge Rader made the point that the interpretation of “a” or “an” as meaning one or more than one is not a presumption or a convention, but a rule.87 While presumptions and conventions are flexible, rules are not.88 Consequently, “a” and “an” should be understood to initially mean one or more than one. As with any rule in life, there are always exceptions and patent law is no different. According to Baldwin, the exception to the rule of indefinite articles occurs when “the language of the claims themselves, the specification, or the prosecution history necessitate a departure from the rule.”89

The Federal Circuit’s decision in North American Vaccine, Inc. provides an example of an exception to the general rule of indefinite articles.90 There, the disputed patent related to crosslinking of proteins by linking them only to a terminal portion of a polysaccharide to preserve the polysaccharide’s antigenic properties to produce an immune response in infants.91 The language in question was “a CH sub2-NH-protein linkage to a terminal portion” as recited in claim

84 See Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342 (Fed. Cir. 2008).
85 THE ENCYCLOPEDIA OF PATENT PRACTICE AND INVENTION MANAGEMENT 152 (Robert Calvert ed. 1964) (“’One,’ ‘A,’ ‘An.’ Unless otherwise qualified, these terms are read as though preceded by ‘at least.’”); In re Teague, 254 F.2d 145, 151–52 (C.C.P.A. 1958) (“Claim 8 reads on a means which is responsive to flow through (pressure differentials at) two orifices because flow through two includes flow through one. Claim 8 does not say ‘only one’ and so it must be construed as meaning ‘at least one.’”).
86 512 F.3d at 1342.
87 Id.
88 See id. (stating that “‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely as a presumption or even a convention”).
89 Id. at 1342–43.
90 7 F.3d 1571 (Fed. Cir. 1993).
91 Id. at 1573.
The court began its analysis with the general rule that “a” can mean one or more than one. Next, the court restated the exception to the general rule that when there is doubt as to the meaning of a claim, courts look to the specification for guidance. Without acknowledging any ambiguity in the claims, the court declared that upon review of the specification there was no indication of the inventor’s intention to include end-to-end linkage (i.e., linkage at more than one terminal end) as part of the invention. The court pointed to specific portions of the patent’s detailed description to support its interpretation that the language of claim 11 meant linkage only to a terminal portion at one end of the polysaccharide. In particular, the court found language such as “a,” “this,” “the,” and “group” as evidence of the patentee’s specific intent to claim linkage at one terminal. The most persuasive evidence was perhaps the patentee’s own statements within the patent declaring that the invention was unlikely to obtain linkage at both terminals. In view of this evidence, the court took the position that the description as a whole invoked the exception to the general rule of indefinite articles, and thus interpreted the term “a” to mean simply one.

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92 See id.
93 Id. at 1575–76.
94 Id. at 1576.
95 Id.
96 Id. Use of the term “a” and reference to “group” in the singular shows that the specification teaches linkage at only one terminal portion. Furthermore, in teaching the direct conjugation of the oxidized polysaccharides with proteins, the specification states “It is unlikely that the reducing terminal sialic acid residue at the opposite end would oxidize to any great extent using these conditions because it exists in solution mainly in its pyranose ring form and such has been found to behave similarly to an interchain residue.” Col. 5, ll. 50–54 (emphasis added). This statement shows that it is “unlikely” to obtain linkage at both terminals. Similarly, with respect to meningococcal group A polysaccharide, the specification teaches “[T]he reducing end-group N-acetylmannosamine residue was made into the most susceptible residue by simply reducing it to its open chain N-acetylmannosaminol derivative. In this form, the modified group A polysaccharide was selectively oxidized at this residue to generate a terminally-located aldehyde group.” Col. 5, ll. 67—col. 6, ll. 5 (emphases added). Again, reference to “the” reducing end group, “this” residue, and “a” terminal aldehyde are consistent with linkage in the singular.
97 Id.
98 Id.
99 Id. at 1577.
The Federal Circuit’s decisions in *Baldwin* and *North American Vaccine*, however, seem to be in tension with one another. In *Baldwin*, the patent’s description was filled with numerous references to “a” and “the” concerning pre-soaked rolls which is similar to the patent in *North American*.\(^{100}\) Even the several figures of the patent in *Baldwin* (Figs. 1 and 2 reproduced below) depict a single pre-soaked roll.\(^{101}\) Furthermore, the specification was completely silent about packaging several rolls together in a single plastic sleeve.\(^{102}\)

![Figure 1](image1.png)

**FIG. 1**

![Figure 2](image2.png)

**FIG. 2**

Figure 1: Figures 1 and 2 reproduced from the patent at issue in *Baldwin*.

Thus, the facts in *Baldwin* appear equally as persuasive as those in *North American Vaccine*, yet the Federal Circuit arrived at an opposite interpretation of the term “a.”\(^{103}\)

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\(^{100}\) See, e.g., U.S. Patent No. Re. 35,976, at [57] (filed Aug. 28, 1996); *id.* at col. 2 ll. 14–28.

\(^{101}\) See *id.* at col. 3 ll. 38–49.

\(^{102}\) See *Baldwin Graphic Sys., Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1343 (Fed. Cir. 2008) (discussing that “[u]nder the terms of this description, the plastic sleeve could be in intimate contact with multiple fabric rolls,” but not citing to any particular text or figures of the patent).

\(^{103}\) See *id.* at 1344 (“In sum with respect to the Reissue patent, this court finds that the district court erred in its construction of ‘a presoaked fabric roll.’”).
Unfortunately, the court’s decision in Baldwin provided only a cursory explanation of its application of the general rule (and its exceptions) for indefinite articles.\(^\text{104}\) In fact, the court dispatched with its analysis in a couple of sentences.\(^\text{105}\) Instead, the court focused on the district court’s flawed reasoning about terms of antecedent basis dictating the meaning of the term “a.”\(^\text{106}\) This analysis is in stark contrast to that in North American, in which the court conducted a detailed review of the specification and clearly identified specific language found therein to justify its claim interpretation.\(^\text{107}\) So, the only way to reconcile these two cases is that in Baldwin one could find literal infringement regardless of the number of rolls packaged by the accused device. Putting aside the interpretation of the term “a,” the language of sealing a fabric roll recited in claim 32 could be interpreted to read on packaging that either individually or collectively seals a roll.\(^\text{108}\)

32. A pre-packaged, pre-soaked cleaning system for use to clean the cylinder of printing machines comprising in combination:

\(^{104}\) See id. at 1343 (“This record does not contain a clear indication that the applicant departed from the general rule for the article ‘a.’ Nothing in the claim language, specification or prosecution history compels an exceptional reading of ‘a’ in this case.”).

\(^{105}\) See id.

\(^{106}\) See id.


\(^{108}\) See Baldwin, 512 F.3d at 1343.

The phrase “disposed around and in intimate contact with the fabric roll” appears twice in the specification of the Reissue patent, and describes the relationship between the plastic sleeve and the fabric roll. Reissue patent, col.2 ll.22-23, col.3 ll.17-18. This description does not require a single pre-soaked fabric roll. Under the terms of this description, the plastic sleeve could be in intimate contact with multiple fabric rolls, like the plastic wrapping on a package of several hot dogs is in intimate contact with each of the hot dogs, despite the fact that the hot dogs themselves contact each other as well as the packaging. Appellant’s Br. at 13. This description contains no requirement, implicit or explicit, that the plastic sleeve must be in intimate contact with the entire fabric roll. For these reasons, “a pre-soaked fabric roll” as used in claim 32 of the Reissue patent is not limited to a single roll.

\(\text{Id.}\)
(1) a pre-soaked fabric roll saturated to equilibrium with cleaning solvent disposed around a core, said fabric roll having a sealed sleeve which can be opened or removed from said fabric roll for use of said fabric roll, disposed therearound, and said system including 

(2) means for locating said fabric roll adjacent to and operatively associated with a cylinder to be cleaned.\textsuperscript{109}

Consequently, the thrust of the court’s decision in \textit{Baldwin} is that no matter the interpretation of “a presoaked fabric roll,” at least one roll within the package would read on the claims. Thus, patent infringement did not require a specific interpretation of the term “a” because the breadth of the claims covered a single roll wrapped individually or together with other rolls in a multiple-roll package.\textsuperscript{110}

But before making a determination of patent infringement, a court must first interpret the claims.\textsuperscript{111} The \textit{Baldwin} court gave only perfunctory support for its construction that “a” means one or more and cited to no part of the specification as evidence.\textsuperscript{112} Rather, the court in \textit{Baldwin} only stated that it found nothing that compels an exceptional reading of “a.”\textsuperscript{113} This reasoning, however, is unpersuasive. The specification evidences a clear intent of the inventor to limit the scope of his invention to systems and methods for a single pre-soaked fabric roll. For instance, there are numerous references in the patent to “a” roll or “the” roll.\textsuperscript{114} Also, the patent’s drawings


\textsuperscript{110} See \textit{Baldwin}, 512 F.3d at 1343.

\textsuperscript{111} See \textit{N. Am. Vaccine}, 7 F.3d at 1574 (“A determination of patent infringement requires a two-step analysis. First, a claim must be interpreted to determine its proper scope and meaning; second, it must be determined whether an accused device is within the scope of the properly interpreted claim.”).

\textsuperscript{112} See \textit{Baldwin}, 512 F.3d at 1343 (stating that the record does not contain a clear indication that the applicant departed from the general rule without analysis of the patent specification or prosecution history in relation to the application of the general rule of indefinite articles).

\textsuperscript{113} See \textit{id}.

\textsuperscript{114} See, e.g., U.S. Patent No. Re. 35,976, at [57] (filed Aug. 28, 1996); \textit{id.} at figs. 1–3; \textit{id.} at col. 3 ll. 54–60; \textit{id.} at col. 5 ll. 58–67.
clearly illustrate only a single roll. The Baldwin court should have accepted these facts and interpreted the claim as reciting a cleaning system with a single pre-soaked roll. At bottom, patentees are responsible for adequately disclosing their inventions.

Even with an interpretation that “a” means just one roll, the accused product in Baldwin still read on the limitation of a pre-soaked fabric roll. There is no limitation, either explicit or implicit, that prevents the claim from reading on several rolls contained in a single package. The breadth of the claim is such that any one of the rolls present in a multi-roll package would satisfy the claim limitations. For instance, there is no limiting language requiring that the sealed sleeve be in direct contact with an entire surface of the roll. If the claims did recite such a limitation, then the accused multi-roll packaging would likely not infringe the claim because none of the rolls in a multi-roll package are entirely in direct contact with the sleeve. Such a limitation would be physically impossible to achieve because at least some portion of each roll would be in contact with an adjacent roll contained in the packaging. Thus, the roll-to-roll physical contact would have prevented the packaging from surrounding an entire circumference of any given roll contained therein. But the claim was not so limited. Instead, claim 32 merely recited that the sleeve be disposed around the roll. Any one of the rolls contained within a multi-roll sleeve has packaging disposed therearound. Otherwise, the rolls would not remain in the packaging but rather fall out. Although not every part of a surface of an individual roll would be in contact with the sleeve packaging, the claim does not require such a packaging configuration. In short, the claim limitation is met by at least one roll contained within a packaging sleeve.

Of note, Judge Rader wrote a dissent in North American in which he laid out the analysis so desperately wanting in Baldwin.

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115 See id. at figs. 1–3.
116 See N. Am. Vaccine, 7 F.3d at 1577.
117 See Baldwin, 512 F.3d at 1343.
118 Id. ("This description contains no requirement, implicit or explicit, that the plastic sleeve must be in intimate contact with the entire fabric roll.").
119 Id.
120 Id. at 1339.
He began with the assertion that the claim was literally infringed and stated that the accused device infringed the claim no matter whether that device linked to one or more terminal ends. As mentioned above, an infringement analysis involves first interpreting the claims and then applying them to the accused device. The dissent’s jumping to the second part of the analysis seems premature and contrary to the traditional infringement framework. After making a determination about infringement, he moved on to the content of the specification to justify that conclusion. In particular, Judge Rader noted that the specification did not call out “monofunctionality” or “monovalency” which in his view would clearly invoke the patentee’s intention to limit the scope of the invention. To buttress this position, the dissent further points to the inventor’s scientific writings as evidence of an intention to claim one or more links at the terminal end. But the use of these scientific journal articles appears to be disingenuous as the dissent previously acknowledged that district court’s reliance on such evidence was improper. Moreover, the dissent attacks the majority’s reliance on the singular terminology of the specification as simply misguided because such language is used for readability of the document. This argument, however, ignores the fact that the patentee as author of his disclosure has a duty to fully describe the invention. If the patentee had desired to claim both single and multiple links, then he should have said so in his patent application. Otherwise, the patentee can attempt to “pull a fast one” on the patent system by disclosing one thing and then claiming exclusive rights in something else. At bottom, Judge Rader is looking for a clear and distinct intent to claim a single

121 *N. Am. Vaccine*, 7 F.3d at 1581 (Rader, J., dissenting).
122 See id. at 1574.
123 See id. at 1581 (Rader, J., dissenting).
124 Id.
125 See id.
126 See id. at 1580 (Rader, J., dissenting).
127 See id. at 1581 (Rader, J., dissenting) (“The singular references in the specification are an effort to preserve grammatical accuracy, not create a limitation.”).
128 See 35 U.S.C. § 112(a) (“The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.”).
But what could be a clearer disavowal than the patentee’s own words and drawings as evinced by the patent itself? In view of Baldwin and North American Vaccine, the proper application of the general rule of indefinite articles is to (1) review the intrinsic evidence for disavowal of claim scope by the patentee; and (2) limit the scope of the claims only when there is evidence showing a clear intention to do so. The Salazar court failed to follow this approach. The court did not find any clear evidence of a demonstrative intent of the patentee to disavow claim scope whether in the claims or elsewhere. This case is just another case in a long line of decisions in which the courts simply fail to take the time to understand the disclosed invention.

IV. A LOOK AT THE BEST EVIDENCE

A closer look at the specification in U.S. Patent 5,802,467 (hereinafter referred to as the ‘467 patent) at issue in Salazar reveals that the patentee’s intent was to only describe the invention in the singular. Generally speaking, the invention relates to cordless telephone technology that links to other appliances in the home (e.g., a cable box, video cassette recorder (“VCR”), television etc.) as illustrated by Figs. 1a–b of the ‘467 patent. To achieve full telephone operations using two-way infra-red (“IR”) communications, an IR data path between devices is required. However, prior art devices lack this two-way IR communications feature. Thus, a stated object of the invention is to provide full two-way RF and IR communication links to all types of devices.

129 See N. Am. Vaccine, 7 F.3d at 1582 (Rader, J., dissenting).
131 See id. at col. 1 ll. 32–34.
132 See id. at col. 1 ll. 50–54.
Figure 2: Figure 1a of the patent at issue in Salazar.

Figure 3: Figure 1b of the patent at issue in Salazar.
Upon review of the specification, the text clearly described the invention with just one microprocessor. Various portions of the specification make mention of the microprocessor using such singular terms as “a,” “the,” and “microprocessor,” in particular as follows:

An interactive microprocessor based wireless communication device includes . . . A microprocessor receives signals from the touch screen and generates a digital data . . . The microprocessor also responds to voice commands . . . The microprocessor uses this single to generate data, command/or control signals for transmission to external devices . . . Telephone ringer signals are generated by the microprocessor . . . These signals are coupled to the microprocessor for further processing, display and/or transmission.134

Two-way sound and/or voice communication, including telephone communications, is controlled by microprocessor 30 via communication links enabled by radio frequency transceiver 50 and/or infra-red frequency transceiver 60.135

Open architecture software within microprocessor 30 creates a generalized command and control protocol which makes it possible to interact in a wireless mode with any number of external devices that have compatible transceivers with wireless communications, command, control and sensing handset 10.136

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133 See, e.g., id. at [57]; id. at col. 2 ll. 47–64; id. at col. 7 ll. 9–33.
134 Id. at [57] (emphasis added).
135 Id. at col. 7 ll. 9–13 (emphasis added).
136 Id. at col. 7 ll. 14–19 (emphasis added).
Microprocessor 30 provides all the timing via an internal or external clock. Database updates and application programs can be downloaded into the microprocessor via the radio or infra-red communication links. Data base updates can also be made via the touch screen or touch sensitive device. The operation of the microprocessor in conjunction with creating the control signals to remotely communicate with external appliances and/or apparatus is explained in detail hereafter.  

Similarly, the drawings in the '467 patent also fail to illustrate any embodiment in which there are multiple microprocessors for generating control signals within a device. Just like the figures in Baldwin, here the illustrations in the '467 patent only depict the invention in the singular. Figs. 2 and 3 of the '467 patent (reproduced below) clearly show that the headset includes just one microprocessor. Similarly, Figs. 4 and 5 illustrate a single chip within the base station.

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137 Id. at col. 7 ll. 25–33 (emphases added).
138 Id. at figs. 4, 5.
Furthermore, a careful reading of the patent makes clear the inventor’s intent to limit the invention to a single microprocessor. The patent’s specification begins by stating that one-way communications severely limit command and control of IR sensors. To address this deficiency, an object of the invention is to provide full two-way IR communication. However, processing of IR signals requires a substantial amount of storage. To solve this problem, the microprocessor is configured to store a finite set of parameters to recreate and generate signals corresponding to a desired command code set. These parameters take substantially less memory space than if the entire IR signal were stored locally on the device.

However, a reasonable reading of the patent reveals that having a plurality of microprocessors would require more storage than a device with single microprocessor. A device having two chips would need enough storage to store all parameters for both microprocessors to enable either processor to recreate or generate a given

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139 See id. at col. 1 ll. 33–37.
140 See id. at col. 1 ll. 50–54.
141 See id. at col. 8 ll. 22–24.
142 Id. at col. 8 ll. 25–28.
143 Id. at col. 8 ll. 28–30.
signal. Such a configuration would increase, not reduce, the storage needs of the device (i.e., likely doubling the storage needs of the device). Perhaps multiple microprocessors could use the same storage if the chips shared parameters and operated in coordination with each other, but that is pure conjecture. First, the specification lacks any description (or even contemplation) of such an embodiment. Second, multiple processors sharing common parameters and coordinating actions would significantly increase the technical complexity of the device and thus require a detailed explanation in the patent to enable one of ordinary skill in the art to practice the invention. In other words, a two-processor arrangement is more than a mere simple modification of the disclosed architecture. Rather, such a configuration requires the creation and implementation of complex signal processing rules to achieve proper functionality and avoid duplicative processing and/or inadvertent data overwriting. Thus, an interpretation that the claims are limited to a single microprocessor capable of performing the recited functionality is the only interpretation supported by the patent.

V. CLAIM LANGUAGE INCONCLUSIVE

Now the claims are considered a part of the specification but are given separate treatment here because of the particular rules and canons of construction that apply to them. For instance, the doctrine of claim differentiation is one such canon that presumes that separate claims having differing language offer different scopes of protection. The doctrine assumes that a failure to account for differences among the counts renders one claim duplicative of another, and thus superfluous. Therefore, a difference in the language of claims is significant. But that difference must be a meaningful one, otherwise two claims can be interpreted as covering the same invention. To avoid improper interpretation of the claims, the doctrine must be applied in light of a patent’s specification to which

145 See id.
146 See id.
147 See id.
the claims are appended. In other words, the doctrine cannot produce an interpretation of the claims broader than that disclosed in the patent.

The Federal Circuit’s decision in Tandon Corp. v. U.S. Int’l Trade Com’n is instructive regarding the proper application of the doctrine of claim differentiation. In that case, the accused device was a double-sided disk drive having two gimbaled transducers. The commission interpreted claims 1 and 12 as requiring an immovable lower transducer rather than a gimbaled transducer. In support of its findings, the commission stated that the patent repeatedly made reference to a “fixed transducer” and the prosecution history included statements that made clear that the lower transducer was non-gimbaled. The patentee, however, disagreed and argued that the doctrine of claim differentiation prevented such an interpretation of the claims. In particular, the patentee argued that claim 5 specifically recited a non-gimbaled transducer while claims 1 and 12 merely recited transducers that were immovable a single direction (i.e., the Z direction) but were otherwise free to move. The

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148 See id. at 1024 (“Whether or not claims differ from each other, one can not interpret a claim to be broader than what is contained in the specification and claims as filed . . . ‘[T]he terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.’” (quoting 37 C.F.R. § 1.75(d)(1) (2009))).
150 831 F.2d 1017 (Fed. Cir. 1987).
151 See id. at 1020.
152 See id. (“The Commission thus undertook to interpret the term ‘fixed’ as used in the claims. The Commission concluded that the claims mean that the lower head is fixed not only in the Z direction, but also in the X and Y directions.”).
153 Id. at 1022–23 (“However, in distinguishing the IBM reference to the patent examiner, Tandon wrote in its remarks accompanying the amendment that the IBM drive employs two pivotable, gimbal heads which . . . during operation . . . move with at least two degrees of freedom to attempt to follow the deviations of the floppy disk from its normal position. In contrast, applicant’s system utilizes one head that has an invariant position bearing against one side of the media without spring loading and this head is nongimbaled.”).
154 See id. at 1023.
155 See id. (“Tandon argues that since claim 5 expressly describes the first transducer as non-gimbaled, claims 1 and 12 must be read as encompassing a gimbaled first transducer. Tandon argues that the ‘doctrine of claim differentiation’ prevents reading into claims 1 and 12 this limitation of claim 5.”).
Federal Circuit disagreed. In rejecting the patentee’s argument, the court concurred with the Commission that written statements distinguishing the invention from the prior art evidenced an intent to limit the scope of the claims. The written record was clear—the patentee plainly and unequivocally stated to the Patent Office that the invention used a non-gimbaled transducer head. Thus, the court declined to apply the doctrine of claim differentiation to enlarge the scope of claims beyond the invention described in the specification as filed.

In Salazar, the doctrine of claim differentiation provides no guidance for interpreting the claims, and its application would likely enlarge the scope of the claims beyond the invention as described. First, the plain language of the claims simply recites “a microprocessor.” Unlike Tandon, where there were differing claim terms (i.e., a transducer having a fixed position in a normal direction and another transducer mounted to a gimbal support means), in Salazar the term “microprocessor” is used consistently across all claims. Further, the claims fail to recite any modifiers or other language that might serve to change the meaning of the term “a microprocessor” among the different claims. Next, none of the dependent claims provide any further limitations regarding the microprocessor (e.g., limitations such as the microprocessor being a single microprocessor or a plurality of processors). Thus, the claims can be

156 Id. at 1024 (“We have considered all of the arguments offered by Tandon, and conclude that on this record the Commission correctly interpreted claims 1, 5, and 12 to mean that the first transducer is fixed in all directions.”).
157 Id. at 1023 (“Although Tandon states that this argument did not apply to claims 1 and 12, the Commission did not accept that view. The Commission’s position is sufficiently supported in the record, for there is nothing in the prosecution history that limits the quoted comments to any particular claim or claims.”).
158 Id. (“The Commission’s position is sufficiently supported in the record, for there is nothing in the prosecution history that limits the quoted comments to any particular claim or claims. Further, Tandon’s specification and prosecution history do not teach any different in degree of fixedness of the first transducer among described or claimed embodiments of the invention.”).
159 Id. at 1024 (quoting 37 C.F.R. § 1.75(d)(1) (2009)).
161 Tandon Corp., 831 F.2d at 1022–23.
162 Id.
163 Id.
interpreted as reciting a single processor or multiple processors without creating any inconsistencies or indefiniteness problems. To put it another way, an interpretation of a single microprocessor or a plurality of processors does not cause any contradiction with dependent claims that would lead to duplicity in protection. Rather, such interpretations limit the scope of all the claims that include a microprocessor, not just some. The doctrine of claim differentiation, therefore, offers no assistance regarding the meaning of “a.” Rather, just like in Tandon, the analysis must shift to the specification where there is clear support for interpreting the claims to recite a single microprocessor. To construe the claims otherwise would allow the patentee to claim more than he invented, which he cannot do. In short, the patent is simply silent about a system that includes multiple microprocessors. Therefore, an interpretation that limits claim scope to a single microprocessor is appropriate. Such an interpretation does not introduce any duplicity in protection that would render another claim superfluous but rather only serves to limit the scope of all the claims. Furthermore, such an interpretation aligns with the scope of the disclosed invention.

Another useful but tricky tool in a decision maker’s toolbox is to apply the literal meaning of claim terms to invoke an exception to the general rule of indefinite articles, but to do so that meaning must be clear and exceptional.\textsuperscript{164} The Federal Circuit’s decision in \textit{Instituform Technologies, Inc. v. Cat Contracting, Inc.} is demonstrative of the difficulties with interpreting terms based on the literal claim language alone.\textsuperscript{165} In that case, the court justified its decision based on (1) a literal reading of the claims, and (2) the specification.\textsuperscript{166} The first rationale, however, is suspect and unpersuasive. The issue in \textit{Instituform} was whether the claim should be construed literally to mean a process using one and only one vacuum cup.\textsuperscript{167} The invention concerned a process for rehabilitating underground

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{164} See Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342–43 (Fed. Cir. 2008).
\item \textsuperscript{165} 99 F.3d 1098, 1105 (Fed. Cir. 1996).
\item \textsuperscript{166} Id. at 1106 (“In light of the language founds in the claims, specification and file history, we conclude the only correct and indeed the reasonable interpretation of claim 1 limits the scope of that claim to a process using only one vacuum cup . . .”).
\item \textsuperscript{167} Id. at 1105.
\end{itemize}
\end{footnotesize}
piping (e.g., underground water lines) without at first expending time and energy to dig up the piping for repair. In more detail, a vacuum pump would facilitate movement of resin within a new felt tubing placed inside the damaged piping to form a new thermoset plastic pipe therein. The vacuum was achieved using a cup and one of a plurality of windows in the felt tubing. Once a section of tubing was filled with resin, the cup was removed and the window sealed. The process was repeated at another window downstream until a thermoset plastic pipe was formed throughout the entire length of the damaged piping. The court began its analysis with the language of the claims and observed that the literal claim language only refers to “a cup.” Next, the court identified a limitation of “a region of vacuum application” and concluded that an interpretation of the term “a cup” to mean more than one would be inconsistent with the plain language of that limitation. But the phrase “a region of vacuum” fails to invoke any numerosity regarding the number of cups. For example, a vacuum could be formed using multiple cups within a given window, so long as the cups enable air to be withdrawn while also preventing air from entering the tubing to form a vacuum. Further, the claims do not recite clear exceptional language like “a single cup,” “only one cup,” or “the only cup.” Based on a literal reading of the claim, a fair interpretation of the language at issue in *Insituform* invokes no exception to the rule indefinite articles. Consequently, the outcome of *Insituform* is representative of the inherent problem with focusing on the claim language alone when construing claim terms—the claim language often fails to recite exceptional language that clearly and unmistakably invokes an exception.

Fortunately, the court did not stop there and continued its analysis with a review of the specification to find additional support. Upon review of drawings and other text of the patent, the *Insituform*
court found support for its meaning that “a cup” means just one.\textsuperscript{175} In particular, the court pointed to text that taught moving the cup downstream upon a section of pipe being fully lined with a resin-impregnated felt layer.\textsuperscript{176} Moreover, the drawings only illustrated the invention with a single vacuum cup.\textsuperscript{177} In light of all the intrinsic evidence, the court concluded that it was reasonable to limit the scope of claim 1 to a process that used only a single cup.\textsuperscript{178} Thus, \textit{Insituform} demonstrates that claim interpretation should not end at the water’s edge of the claims but must venture into the dense and fruitful forest of an invention’s description.

Referring back to Salazar, a literal interpretation of the claims offers no clarity as to their meaning. Based on the text of the claims alone, it is difficult to ascertain a meaning of the phrase “a microprocessor.”\textsuperscript{179} As can be seen from claim 1 reproduced below, none of the other language of the claim on its face appears to limit the scope of the meaning of the phrase “a microprocessor.”

A communications, command, control and sensing system for communicating with a plurality of external devices comprising:

\begin{quote}
\textit{a microprocessor} for generating a plurality of control signals used to operate said system, \textit{said microprocessor} creating a plurality of reprogrammable communications protocols for transmission to said external devices wherein each communication protocol includes a command set that defines the signals that are employed to communicate with each one of said external devices;
\end{quote}

\begin{quote}
a memory device couple to \textit{said microprocessor} configured to store a plurality of parameter sets
\end{quote}

\textsuperscript{175} \textit{Id.} at 1106 (“Turning to the text of the specification, we note that neither the specification nor the drawings disclose the use of more than one cup.”).
\textsuperscript{176} \textit{Id.} at 1103, 1106.
\textsuperscript{177} \textit{Id.} at 1106.
\textsuperscript{178} \textit{Id.}
retrieved by *said microprocessor* so as to recreate a desired command code set, such that the memory space required to store said parameters is smaller than the memory space required to store said command code sets;

a user interface couple to *said microprocessor* for sending a plurality of signals corresponding to user selections to *said microprocessor* and displaying a plurality of menu selections available for the user’s choice, *said microprocessor* generating a communications protocol in response to said user selections; and

an infra-red frequency transceiver couple to *said microprocessor* for transmitting to said external devices and receiving from said external devices, infra-red frequency signals in accordance with said communications protocols.\(^ {180} \)

As can be seen, the plain language of the claims could be read to mean that different microprocessors share the memory, the user interface, or the transceiver. The difficulty raised with such an interpretation is the patent’s complete failure to teach one of ordinary skill in the art to practice that invention. This is the same fundamental conclusion reached by the court in *Insituform*.\(^ {181} \) Although, a literal reading of the claims in *Salazar* is inconclusive as to the proper interpretation of the phrase “a microprocessor,” the patent’s text and figures suggest that a singular interpretation of that phrase is appropriate.

Furthermore, literal interpretations of claim language can be problematic when that meaning is applied to words of antecedent basis. That was the case in *Baldwin*. There, the district court limited

\(^ {180} \) *Id.* (emphases added).

\(^ {181} \) *Insituform Technologies, Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098, 1106 (Fed. Cir. 1996) (“Turning to the text of the specification, we note that neither the specification nor the drawings disclose the use of more than one cup.”).
the scope of the claims to “a single fabric roll” based on subsequent claim language that recited “said fabric roll.”\textsuperscript{182} The \textit{Baldwin} court disagreed.\textsuperscript{183} First, the use of a definite article to refer back to an indefinite article does not implicate nor mandate a singular meaning because “said” is anaphoric phrase which under the general rules of grammar does not indicate a definitive numerosity.\textsuperscript{184} Further, the district court’s conclusion that the USPTO antecedent basis rules supported its claim interpretation was unavailing because the Office’s antecedent basis rules require use of “the” or “said” for purposes of claim clarity and understanding.\textsuperscript{185} The claim at issue in \textit{Baldwin} could be interpreted as either reciting “a single roll” or “a plurality of rolls” without making the claim indefinite. So, the terms of antecedent basis recited in the claim offer no guidance as to the proper interpretation of the claim.

Applying the teachings of \textit{Baldwin} to the present case in \textit{Salazar} yields similar results. As can be seen below, claim 1 of \textit{Salazar} recites “a microprocessor” and “said microprocessor.”\textsuperscript{186} This language appears to be merely used to refer back and offers no indication of definitive numerosity. The language was likely included to simply satisfy the Office’s antecedent basis requirements. In short, the claim language appears to be included not to limit the scope of the claim but rather to avoid confusion in understanding it. And the application of the general rule of indefinite articles does not introduce any uncertainty or indefiniteness in the claim. Thus, just like in \textit{Baldwin}, a literal reading of the claim language in \textit{Salazar} does not inform a particular claim interpretation.


\textsuperscript{183} Id. at 1343.

\textsuperscript{184} Id. at 1342.

\textsuperscript{185} Id. at 1343.

VI. ANALYSIS OF DISTRICT COURT DECISION

The Federal district court’s decision in *Salazar v. AT&T Mobility, LLC* is an odd one because the court stated the correct claim interpretation rules, but then misapplied those rules to arrive at its decision. The court began with the analytical framework that included the use of both intrinsic evidence (i.e., the claims themselves, the patent’s detailed description, and the prosecution history) and extrinsic evidence (e.g., technical dictionaries and treatises). Notably, the court stated that the specification is highly relevant in determining a claim’s meaning and is often the best guide to understanding a disputed term. The district court further explained that the terms of a claim are given their plain and ordinary meaning unless (1) a patentee sets out his or her own definition in the specification or (2) the specification or prosecution history indicates an intent by the patentee to limit the scope of the claims.

With that framework in mind, the court addressed the differing views of the parties regarding the meaning of “a microprocessor.” The court quickly determined that the claims required one processor to perform all the recited functions based on a plain meaning of the claims. Instead of applying the framework laid out above, the court instead cited to Federal Circuit precedent in *Convolve, Inc. v. Compaq Computer Corp.* and *In re Varma* for the legal proposition that the claim language alone may require a singular meaning.

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187 The prosecution history of U.S. Patent No. 5,802,467 at issue in *Salazar* is not discussed here as it was not decisive (or even mentioned) in the District Court or Federal Circuit decisions. The author of this article endeavored to obtain a copy of the prosecution history, but a copy of the file wrapper was not freely available to the public and the cost to obtain a copy from the United States Patent Office was unnecessarily expensive.


189 Id. at *9, *11.

190 Id. at *10.

191 Id. at *12–13.

192 Id. at *46–49 (explaining that plaintiff contends that each recited microprocessor limitation may be satisfied by a different microprocessor, while defendants assert that the claim requires at least one processor capable of performing all the recited microprocessor functions).

193 Id. at *47.

194 812 F.3d 1313 (Fed. Cir. 2016).

195 Id. at 1352.
of the term.\textsuperscript{196} The court also attempted to further buttress its decision by pointing to the usage of definite articles in the claim.\textsuperscript{197} Putting aside the Federal Circuit precedent for now, the court made specific reference to usage of “a microprocessor” and “said microprocessor” as recited in the claims for support of its claim interpretation but that logic was flatly rejected in the Federal Circuit’s decision in \textit{Baldwin}. As previously discussed, in that case the district court largely relied on the subsequent use of “said fabric roll” as suggesting a meaning of a singular fabric roll.\textsuperscript{198} That rationale, however, was soundly rejected by Judge Rader since the use of a definite article (e.g., “said” or “the”) to refer back to an initial indefinite article does not implicate or mandate a singular meaning.\textsuperscript{199} The district court’s further reliance on the Manual of Patent Examining Procedure (“MPEP”) in \textit{Baldwin} was also misplaced as well.\textsuperscript{200} Therefore, the \textit{Salazar} court’s reasoning that usage of definite and indefinite articles in the claims naturally invokes a singular meaning of the phrase “a microprocessor” is unavailing and simply incorrect.

Returning to the district court’s other support in \textit{Salazar}, namely \textit{Convolve} and \textit{Varma}, those decisions are readily distinguishable too. Taking each in turn, we begin with the Federal Circuit’s decision in \textit{Convolve}.\textsuperscript{201} In that case, the dispute involved the interpretation of a claim reciting a processor associated with a user interface.\textsuperscript{202} Again, the Federal Circuit reiterated the general rule of indefinite articles.\textsuperscript{203} Then the court held that the phrase “a processor”

\begin{footnotesize}
\begin{enumerate}
\item \textit{Id.} at *51.
\item Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1343 (Fed. Cir. 2008).
\item \textit{Id.} (“Because the initial indefinite article (‘a’) carries either a singular or plural meaning, any later reference to that same claim element merely reflects the same potential plurality . . . . Because the initial phrase carries no definitive numerosity, the anaphoric phrases do not alter that meaning in the slightest.”).
\item \textit{Id.} (“Contrary to the district court’s analysis, § 2173.05(e) of the Manual of Patent Examining Procedure (MPEP) does not suggest otherwise. Section 2173.05(e) describes the need, in most cases, for claim terms to have proper antecedent bases . . . .”).
\item \textit{Id.} at 1320.
\item \textit{Id.} at 1321.
\end{enumerate}
\end{footnotesize}
recited in claims 9 and 15 meant one or more processors. Claim 9 is representative and reproduced below.

9. Apparatus for controlling operation of a data storage device, the device comprising:

- a memory which stores computer-executable process step; and

- a processor which executes the process steps so as (i) to generate a user interface, the user interface controlling one of a seek time of the data storage device and a seek acoustic noise level of the data storage device, (ii) to alter settings in the user interface for one of the seek time and the seek acoustic noise level of the data storage device in inverse relation, and (iii) to output commands to the data storage causing the data storage device to alter seek trajectory shape by shaping input signals to the data storage device to reduce selected unwanted frequencies from a plurality of frequencies in accordance with the altered settings in the user interface.

Strikingly, the court in Convolve invoked the general rule despite other language of the claim being written in the plural form which could lead some to make the logical leap that the claim must require multiple processors. Furthermore, the Convolve court even went beyond the language of the claims finding support for its interpretation in the patent’s specification—something the court in Salazar failed to do. Consequently, the Convolve holding that the

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204 Id.
205 U.S. Patent No. 6,314,473C1, col. 2 ll. 7–22 (reexamination request Dec. 1, 2006).
206 Convolve, 812 F.3d at 1321 (“Here, we find no such evidence of clearly limiting ‘a processor’ to a singular processor. While it is true that the patentee recited other claim terms in the plural, e.g., ‘output commands,’ ‘alter settings,’ or ‘input signals,’ this does not compel a departure from our general rule that ‘a’ means ‘one or more’ when following the open-end term ‘comprising.’”).
207 Id. (“Such a conclusion is bolstered by the specification’s plain disclosure of an embodiment where ‘seeks’ are controlled by a ‘separate controller dedicated to the disk drive.’”).
Referring back to the Federal Circuit’s decision in Convolve, that court next moved on to claims 1, 3, and 5. In doing so, the court first noted that the structure of the claim (i.e., use of “a” in the preamble and “the” in the body of the claim) necessitated a different result in the application of the general rule. The court relied on use of definite articles to refer back to a processor as evidence of an intent to claim a single processor. But this rationale completely disregards the general rule and lacks any precedent. First, as discussed above in Baldwin, the usage of definite articles to refer back to a component recited in a claim does not change the general rule. Furthermore, a relationship between a processor and a user interface invokes no numerosity, but rather interoperability among components. One of ordinary skill in the art would readily understand that a user interface can function with one or more processors depending on its architecture. Practically speaking, the general rule of indefinite articles could have been easily applied here as well to interpret the claim as covering devices with one or more processors. Thus, there is no reason why the claim cannot have a meaning of one or more processors if that was what the patentee invented and later described in the patent.

The Convolve court also pointed to usage of the phrase “a processor” in the preamble and the usage of the definite article “the” in the body of the claim as evidence of singular meaning. But there is no preamble exception to the general rule. Even assuming for the phrase “a processor” meant one or more processors conflicts with the conclusion reached in Salazar.
sake of argument that a preamble exception to the general rule of indefinite articles did exist, that exception would not apply in this case. The claims at issue in *Salazar* do not recite “a microprocessor” within their preamble. Instead, the term “microprocessor” is merely recited within the body of the claim and thus rests squarely within the bounds of the general rule.\(^\text{214}\) Consequently, *Convolve* is readily distinguishable from *Salazar*, which makes any reliance by the *Salazar* court on *Convolve*’s preamble exception to the rule a red herring.

The problem with the *Salazar* decision is that the district court did not review the best evidence, but rather cast its gaze on the claims in a tunnel-vision like manner. Whether or not an element of the claim is introduced in the preamble or body has no effect on the application of the general rule of indefinite articles.\(^\text{215}\) Instead, the court needed to go back to the specification or the prosecution history to find an exception to that general rule.\(^\text{216}\) Without an exception, the rule of indefinite articles applies. Thus, *Convolve* provides no support for the decision in *Salazar* because any inference derived from use of definite articles to refer back is incorrect.\(^\text{217}\) Further, *Convolve*’s “preamble” exception to the general rule is not applicable to the claims in *Salazar* because the claims fail to recite “a microprocessor” in the preamble.

Similarly, *Varma* also fails to justify the district court’s decision in *Salazar*. The issue in *Varma* was whether the phrase “a statistical
analysis request” corresponded to a single investment or multiple investments. The Patent Trial and Appeal Board concluded the latter, but the Federal Circuit disagreed. To support its conclusion, the Varma court correctly stated that the term “comprising” does not make every term recited in the claims open-ended. Next, the Federal Circuit addressed the Board’s reliance on the general rule for indefinite articles. In refraining from applying the general rule, the Varma court relied on a proposition in its decision Harari that surrounding words of a claim should be considered before applying the general rule of indefinite articles. But Harari makes clear that claims are read in light of both the claims themselves and the specification. Context of words within a claim is not enough to disregard the general rule of indefinite articles. But the court in Varma never provided any analysis of the specification in making its determination that Board had erred. If the specification had described the invention only in terms of a relationship between one request and two investments then that would have been dispositive. But the decision in Varma lacks any mention of such intrinsic evidence to support its interpretation. Accordingly, the analysis in Varma is incomplete and cannot possibly be a sound basis on which to support the court’s decision in Salazar.

218 In re Varma, 816 F.3d 1352, 1362 (Fed. Cir. 2016).
219 Id. (“The Board implicitly relied on two related but different interpretations. In Interpretation 1, the claim phrase embraces a request that calls for a statistical analysis of a single investment . . . . The error of Interpretation 1 is plain from the claim phrase at issue. The phrase requires ‘a statistical analysis request corresponding to two or more selected investments.’ . . . . That language on its face excludes Interpretation 1.” (internal citation omitted)).
220 Id. (“The Board relied on the claims’ use of ‘comprising’ as the transitional term but that term does not support Interpretation 1. Although, the transitional phrase term ‘comprising’ indicates that the claim is open-ended, the term does not render each limitation or phrase within the claim open-ended.”).
221 Id.
222 Id.
223 Harari v. Lee, 656 F.3d 1331, 1341 (Fed. Cir. 2011) (“[W]e read the limitation in light of the claim and specification to discern its meaning.”).
224 See id. (“When the claim language and specification indicate that ‘a’ means one and only one, it is appropriate to construe it as such even in the context of an open-ended ‘comprising’ claim.”).
225 See In re Varma, 816 F.3d at 1362–63.
In summary, the district court’s decision in *Salazar* is flawed for a few reasons. First, the court remained stuck in the claims and never explored the detailed description to understand what exactly the patentee had invented or to confirm any claim interpretation found in the claims. In doing so, the court disregarded its own stated framework for proper claim interpretation and avoided usage of the best guide for understanding disputed terms (namely, the specification). Second, the court’s decision rests on the flawed notion that use of definite articles in claims is an indication of a patentee’s intent to limit the claimed invention. As noted above, that logical argument was thoroughly rejected in *Baldwin* by an explanation that usage of definite articles is necessary to comply with antecedent basis requirements of the Patent Office.

VII. ANALYSIS OF FEDERAL CIRCUIT DECISION

The Federal Circuit’s decision in *Salazar v. AT&T Mobility LLC* is a muddled mix of conflicting patent principles (e.g., “a” meaning one or more conflicting with antecedent basis rules) while ignoring others (e.g., a patent’s specification is the primary source when construing patent claims). Moreover, the decision further perpetuates the inaccurate construction that the transitional phrase “comprising” has a direct impact on the meaning of the term “a” in a claim. In short, this opinion is one that gives patent law a bad reputation. The opinion turns the issue of claim interpretation into a contorted legal analysis that somehow ends up at the correct result albeit for the wrong reasons.

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226 See *Salazar v. AT&T Mobility LLC*, 64 F.4th 1311, 1317–18 (Fed. Cir. 2023) (“Like the claim language in *Convolve* and *Varma*, the claim language here requires a singular element—‘a microprocessor’—to be capable of performing all of the recited functionality . . . . This conclusion is bolstered when we consider *Convolve’s* claim 9, which had no subsequent reference to ‘the’ or ‘said’ processor, and thus did not require a single processor.”).

227 *Id.* at 1316 (citing to *Harari* for the proposition that the language of the claims alone is sufficient to yield an exception to the general rule of indefinite articles.).

228 *Id.* at 1315 (“We have explained that the indefinite article ‘a’ means ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’”); *In re Varma*, 816 F.3d 1352, 1362 (Fed. Cir. 2016) (“Although the transitional term ‘comprising’ indicates that the claim is open-ended, the term does not render each limitation or phrase within the claim open-ended.”).
The opinion began with the fundamental tenet of patent law that words of a claim are given their ordinary meaning that one of ordinary skill would have understood them to mean at the time of invention.\textsuperscript{229} The court then quickly moved on and made the definitive statement that the term “a” means one or more in open-ended claims containing the transitional phrase “comprising.”\textsuperscript{230} But as previously explained, that statement is incorrect. The meaning of “a” has nothing to do with the transitional phrase “comprising.” Rather, “comprising,” when used in the preamble of a claim (as was done in claim 1 at issue in this case) means “including the following elements, but not excluding others.”\textsuperscript{231} Any other understanding of “comprising” is incorrect. A proper interpretation of “a” is the general rule of indefinite articles as discussed above (i.e., meaning one or more than one unless the patentee disavowed that claim scope).\textsuperscript{232} Thus, the Federal Circuit’s opinion got off on the wrong foot, rendering its decision fatally flawed from the beginning.

Next, the court quickly discussed its decision in \textit{Baldwin Graphic Sys., Inc. v. Siebert, Inc.} to explain that the word “said” refers back to a previously claimed term, and not an intent to limit the scope of the claim.\textsuperscript{233} But then the court moved swiftly to distance itself from \textit{Baldwin} with reference to its decision in \textit{Harari v. Lee}.\textsuperscript{234} In that case, the \textit{Harari} court stated that \textit{Baldwin} does not set a hard and fast rule that “a” always means one or more than one.\textsuperscript{235} But the \textit{Baldwin} court clearly stated that a rigid rule applies to the use of indefinite articles, albeit with some extremely limited exceptions.\textsuperscript{236} That statement in \textit{Harari} was misleading because one can infer that the rule is merely discretionary. But that is not the case—

\begin{itemize}
  \item \textsuperscript{229} \textit{Id.}
  \item \textsuperscript{230} \textit{Id.}
  \item \textsuperscript{231} \textit{See LANDIS, supra note 10, at 11 (“The word ‘comprises’ has been construed to mean, in patent law, ‘including the following elements but not excluding others.’”)}.
  \item \textsuperscript{232} \textit{Baldwin Graphic Sys., Inc. v. Siebert, Inc., 512 F.3d 1338, 1342–43 (Fed. Cir. 2008)}.
  \item \textsuperscript{233} \textit{Salazar, 64 F.4th at 1315}.
  \item \textsuperscript{234} \textit{See id. at 1316 (discussing how \textit{Harari} mentions that \textit{Baldwin} does not set a hard and fast rule that “a” always means one or more than one.)}. \textit{Harari v. Lee, 656 F.3d 1331 (Fed. Cir. 2011)}.
  \item \textsuperscript{235} \textit{Harari, 656 F.3d at 1341}.
  \item \textsuperscript{236} \textit{Baldwin, 512 F.3d at 1342 (“That ‘a’ or ‘an’ can mean ‘one or more’ is best described as a rule, rather than merely a presumption or even a convention.”)}.
\end{itemize}
the rule of indefinite articles applies unless a particular exception exists. Unfortunately, the Salazar court understood that statement in Harari to mean it had license to disregard the rule and take a free hand to interpret the claim based on only the text of the claims.\textsuperscript{237}

But the decision in Harari rested on more than just the claim language. Rather, the Harari court found support in the detailed description for its interpretation of the article “a.”\textsuperscript{238} Accordingly, the Harari court applied the general rule and found an exception in the description from which the claim originated.\textsuperscript{239} The Salazar court’s claim-language-only analysis can find no safe harbor in Harari.

Not done with avoiding its obligation to look to the patent’s description to properly construe the claims, the Salazar court cited to the decisions in Convolve and In re Varma as precedential cover for

\textsuperscript{237} See Salazar, 64 F.4th at 1316 (“Noting that ‘Baldwin . . . does not set a hard and fast rule that “a” always means one or more than one,’ we determined that “[t]he plain language of the claim clearly indicates that only a single bit line is used when assessing a number of cells.” (quoting Harari, 656 F.3d at 1341)).

\textsuperscript{238} Harari, 656 F.3d at 1341–42.

The Lee patent explains that the drains of the cells in one row are all connected to a single digit line. A subset of the cells in the row can be accessed by applying a voltage to the control gates of only some of the cells in the row via their control lines, which are connected to the cells in columns. Lee further explains that if any one or more of the cells in the row are over-erased, the drain voltage (VD) sensed at that row’s digit line will be positive. If only some of the cells in the row are selected, a positive drain voltage on the digit line reveals if any of the selected cells are over-erased. The Lee patent also discloses, but does not recite in claim 1, finding which cell of the selected cells is over-erased. Lee explains that an over-erased cell can be “healed” by applying a healing voltage for a short time to its drain via the digit line and to its control gate while applying 0 volts to its source. Lee does not consider accessing more than one digit line at a time but instead describes traversing through memory, digit line by digit line. The number of cells activated corresponds to the number of control gates accessed. Accordingly, we conclude that the correct and only reasonable construction of the claim terms “a bit line” and “said bit line” as read in light of the Lee specification is that Harari’s claim 63 requires that a single bit line activates multiple memory cells.

\textsuperscript{239} Id. (citations omitted).

\textsuperscript{239} Id. at 1342 (“Accordingly, we conclude that the correct and only reasonable construction of the claim terms ‘a bit line’ and ‘said bit line’ as read in light of the Lee specification is that Harari’s claim 63 requires that a single bit line activates multiple memory cells.”).
its interpretation of the claims.\textsuperscript{240} But as discussed above, those decisions are flawed as well for failing to go back to the detailed description or prosecution history to understand the claim language. Thus, the legal foundation on which the court’s decision in \textit{Salazar} rests is no foundation at all. Rather, the decision relies on one flawed precedent stacked upon another that fail to follow the proper legal analysis laid out in \textit{Harari, North American} and others.

For example, the case of \textit{Autogiro Company of America v. United States} provides an instructive example of understanding a patent’s claimed invention by use of its specification.\textsuperscript{241} In that case, the United States Court of Claims addressed several patents related to rotary structures and control systems for winged aircraft.\textsuperscript{242} Before discussing the patents, the court laid down some fundamental rules about how to derive the meaning of claims.\textsuperscript{243} First, to determine the meaning of a claim three pieces of evidence are used: (1) the patent’s specification; (2) patent drawings; and (3) prosecution history of the patent.\textsuperscript{244} Taking each one in turn, the court described the statutory role of the specification as aiding in the determination of scope and meaning of claims.\textsuperscript{245} To that end, the words of the specification and claims must be used in the same way.\textsuperscript{246} This aligns with the general principle that a patentee’s broadest claims can be no broader than his actual invention.\textsuperscript{247} Next, the court explained that drawings can be used in the same manner as the text of the specification to help understand the scope or meaning of claims appended thereto.\textsuperscript{248} Finally, the court addressed the importance of

\textsuperscript{240} See \textit{Salazar}, 64 F.4th at 1316–18 (discussing \textit{Convolve} and \textit{In re Varma} and citing to those decisions as precedent to justify holding that claim language alone is sufficient to find an exception to the general rule of indefinite articles).

\textsuperscript{241} 384 F.2d 391 (Ct. Cl. 1967).

\textsuperscript{242} \textit{Autogiro Co. of Am.}, 384 F.2d at 401.

\textsuperscript{243} \textit{Id.} at 397–98.

\textsuperscript{244} \textit{Id.} at 397 (“In deriving the meaning of a claim, we inspect all useful documents and reach what Justice Holmes called the ‘felt meaning’ of the claim. In seeking this goal, we make use of three parts of the patent: the specification, the drawings, and the file wrapper.”).

\textsuperscript{245} \textit{Id.}

\textsuperscript{246} \textit{Id.}

\textsuperscript{247} Kemart Corp. v. Printing Arts Rsch. Lab’ys, Inc., 201 F.2d 624, 629 (9th Cir. 1953).

\textsuperscript{248} See \textit{Autogiro}, 384 F.2d at 398.
a patent’s file wrapper in understanding the meaning and scope of claims. The prosecution history is a critical piece of information because it contains all the expressed representations of the applicant to receive a patent. In other words, the file wrapper provides clarity regarding the bargain struck between the applicant and the government for patent rights.

With these principles in hand, the court next examined the several patents at issue. The court’s analysis of claim 3 of U.S. Patent 1,947,901 is instructive and representative of the application of the general principles discussed above. Regarding the ‘901 patent, the dispute between the parties concerned the meaning of the phrase “so proportioned” as recited in claim 3 (the entire claim is reproduced below for context).

3. In an aircraft, a sustaining rotor construction having blades mounted for movement with respect to an axis member and so proportioned that, under the influence of air currents, the blades have an average autorotational speed at the tip substantially in excess of the maximum flight speed of which the craft is capable, the blades of the rotor being of an aerofoil section of substantially fixed centre of pressure and arranged, with respect to the axis member, in such manner as to be free to assume positions of equilibrium between inertia and lift forces at various points in their general path of rotative travel and said blades being set at a positive incidence calculated with respect to the no-lift position relative to a plane perpendicular to the axis of rotation.

The plaintiff patent owner argued that the phrase “so proportioned” referred to the construction of individual blades having a particular cross-sectional shape. The court disagreed, finding that

249 Id.
250 Id.
251 Id. at 403.
253 See Autogiro, 384 F.2d at 404 (“Plaintiff contends that ‘so proportioned’ refers to the construction of the individual blades. It cites specification references to ‘a thin or medium-thick section of substantially fixed center pressure.’”).
the disputed phrase refers to a relationship between rotor blades and a fixed wing. The court pointed to specific parts of the patent to support its finding. For example, the specification included a description disclosing “proportioning” as meaning a relationship between rotor blades and a fixed wing. That relationship was also the only one described as part of the patent’s specification, further buttressing the court’s claim interpretation. The file wrapper did not help the plaintiff’s case either, as that evidence did not compel a different interpretation other than rotor blade-fixed wing relationship. Thus, in light of the best evidence, the court construed “so proportioned” to mean rotor blade-fixed wing relationship.

Similarly, the Federal Circuit’s decision in Immunex Corp. v. Sanofi-Aventis U.S., LLC illustrates an example of thorough claim interpretation. There, the parties disagreed over whether the term “human antibody” included partially human antibodies. The Immunex court began its analysis with the patent law cannon that patent claims are given their broadest reasonable meaning in light of the specification. After reviewing the intrinsic record, Judge Prost

254 See id.
255 Id. at 403.
256 Id.

[T]he present invention contemplates certain novel features of proportioning and disposition of the blades and blade system, and the relation thereof to the fixed lifting surfaces . . . . According to the most complete development of the invention, however, I contemplate combining in the same construction, fixed wings of a certain positive incidence in conjunction with a rotor having freely swinging air-rotated blades, each of which blades is itself set at positive incidence with relation to a no-lift setting on the axis.

Id. (internal quotations omitted).

257 See id. at 404 (“In a section which discusses embodiments of the ‘901 patent, the specification expressly discusses proportioning. The embodiments referred to in this section are not means of proportioning the rotor blades but various relationships between the rotor and a fixed wing. The rotor blade-fixed wing relationship is constant throughout this section. No other relationship is suggested, only various ratios of this relationship.”).
258 Id.
259 See id.
260 977 F.3d 1212, 1218–19 (Fed. Cir. 2020) (discussing specific portions of the patent’s specification as part of its claim construction analysis).
261 Id. at 1215.
262 Id. at 1217.
quickly concluded that the generic term “antibody” as recited in the claims offers no restrictive meaning (i.e., does not require that the antibodies be entirely human). Similarly, the court found that the dependent claims offered little help as to the meaning of the term “human antibody.”

Next, the court continued its claim construction analysis with a review of the single best guide as to the meaning of a disputed term—the patent specification. First, the court observed that the patentee failed to expressly define the term “human antibody” in the description of the invention. However, upon a closer reading, the court noted that the patentee did provide several instances of disclosure that distinguished between fully and partially human antibodies. The court therefore found support in the specification for an interpretation of the claims that covered both fully and partially human antibodies.

Finally, the last piece of intrinsic evidence looked at by the court was the prosecution history. In its analysis, the court found that the claims were amended from “an isolated antibody” to recite “a human antibody.” Immunex argued that the amendment surrendered claim scope related to partially human antibodies. However, the court disagreed, finding the term “human antibody” to include antibodies which are not fully human. As such, no actions by Immunex during prosecution limited the scope of the claims to “fully human.”

Both Autogiro and Immunex illustrate proper claim interpretation in stark contrast to that in Salazar. The Salazar court’s decision focused purely on the language of the claims, and completely ignored the best guide (the specification) and patent’s prosecution.

263 Id. at 1218.
264 Id.
265 Id.
266 Id.
267 Id. at 1218–19.
268 Id. at 1219.
269 Id. at 1219–20.
270 Id. at 1220.
271 Id.
272 Id.
273 Id. at 1221.
history. The framework is clear and longstanding—review the claims, then the drawings and detailed description, and finally the prosecution history. It is surprising that the court arrived at the right conclusion, given it did not consider all the key pieces of evidence.

CONCLUSION

The Federal Circuit’s decision in Salazar reaches the correct result but for all the wrong reasons. The decision is another one in an ever-growing list of cases that misapply basic patent law rules and continue to disregard the court’s duty to fully understand an invention before determining the scope of a claim.274 The longstanding rule of indefinite articles is no longer a rule at all. The Salazar decision renders that rule out of reach for patentees because the mandate by the Patent Office requiring the use of definite articles makes a literal, singular reading of the claims a fait accompli. As discussed above, the recent trend is for courts to strictly adhere to the text of the claims. Judges are reluctant to even peek at the invention’s description for fear of importing limitations into the claims. But that thinking negates the sole purpose of the specification—to inform the public about the claimed invention. There is absolutely no risk of

274 See, e.g., Abtox, Inc. v. Exitron Corp., 122 F.3d 1019, 1023 (Fed. Cir. 1997) (“However, patent claim parlance also recognizes that an article can carry the meaning of ‘one or more,’ for example in a claim using the transitional phrase ‘comprising.’”); Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 977 (Fed. Cir. 1999) (“However, patent claim parlance also recognizes that an article can carry the meaning of ‘one or more,’ for example in a claim using the transitional phrase ‘comprising.’”); Convolve, Inc. v. Compaq Comput. Corp., 812 F.3d 1313, 1321 (Fed. Cir. 2016) (“This court has repeatedly emphasized that an indefinite article “a” or “an” in patent parlance carries the meaning of “one or more” in open-ended claims containing the transitional phrase “comprising.”” (internal citation omitted)); See Salazar v. AT&T Mobility LLC, 64 F.4th 1311, 1315 (Fed. Cir. 2023) (“At issue in this appeal is the proper construction of the articles ‘a’ and ‘said.’ We have explained that the indefinite article ‘a’ means ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’”); In re Varma, 816 F.3d 1352, 1362 (Fed. Cir. 2016) (“Although the transitional term ‘comprising’ indicates that the claim is open-ended, the term does not render each limitation or phrase within the claim open-ended.”).
importing a limitation into a claim, if one looks to understand a limitation already present therein.275

Here, the detailed description and corresponding drawings of the patent clearly demonstrate that the patentee invented a device that implemented use of a single microprocessor. No other interpretation of the claims is reasonable. The patentee’s arguments that “a” means more than one appear to be retrospective, attempting to address poor patent drafting or combat a clever technological work around. Putting aside any enablement concerns, the patent simply failed to provide any description—not a single phrase, sentence, paragraph, or figure—that disclosed a multi-processor system. Any of which would have been enough to achieve the claim construction so desperately sought by the patentee. But no such description was present. Instead, the patentee asked the court to give him exclusive rights in an invention which he had not properly disclosed to the public. The courts rightly denied the patentee’s broad claim construction, but their reasoning was faulty. The foundation of their rationale consisted of precedent that misapplied longstanding patent law rules.276

The Federal Circuit was created with a vision of developing a consistent and prudent patent law within the authorized statutory framework.277 These jurists assume the role of expert in patent

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275 See Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985) (discussing that claims are construed in light of complete patent documents without any warning or admonition about the risk of importing limitations from that description into the claims).

276 See, e.g., Convolve, 812 F.3d at 1321 (“This court has ‘repeatedly emphasized that an indefinite article “a” or “an” in patent parlance carries the meaning of “one or more” in open-ended claims containing the transitional phrase “comprising.”’”); McCarthy, supra note 13, at 85.

277 Landmark Legislation: Federal Circuit, FED. JUD. CTR., https://www.fjc.gov/history/legislation/landmark-legislation-federal-circuit [https://perma.cc/EA5P-XGU9] (last visited Mar. 23, 2024) (“In an effort to promote greater uniformity in certain areas of federal jurisdiction and relieve the pressure on the dockets of the Supreme Court and the courts of appeals for the regional circuits, the Congress in 1982 established what is now the only U.S. court of appeals defined exclusively by its jurisdiction rather than geographical boundaries. The U.S. Court of Appeals for the Federal Circuit assumed the jurisdiction of the U.S. Court of Customs and Patent Appeals and the appellate jurisdiction of the U.S. Court of Claims. The new court was authorized to hear appeals from several federal administrative boards as well . . . [T]he studies drew attention to the problems associated with the lack of uniform rulings in specialized areas of jurisdiction.”).
matters. They are tasked with smoothing out the jurisprudential waves previously caused by conflicting circuit court decisions. The *Salazar* decision represents another unfortunate failure to achieve this statutory mandate. The decision ignores longtime precedent while misstating the fundamental rules of patent law for which they are regarded as the judicial experts. After more than forty years, the Federal Circuit has now lost its way.

278 See 28 U.S.C. § 1295 (2012) (“(a) The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction—(1) of an appeal from a final decision of a district court of the United States, the District Court of Guam, the District Court of the Virgin Islands, or the District Court of the Northern Mariana Islands, in any civil action arising under, or in any civil action in which a party has asserted a compulsory counterclaim arising under, any Act of Congress relating to patents or plant variety protection . . .”).